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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,913	09/18/2001	Gary N. Lai	034560-078	9723

7590 12/14/2005  
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EXAMINER

DO, CHAT C

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 12/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/955,913

Applicant(s)

LAI ET AL.

Examiner

Chat C. Do

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-4 and 18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This communication is responsive to Amendment filed 10/03/2005.
2. Claims 1-4 and 18 are pending in this application. Claims 1 and 18 are independent claims. In Amendment, claims 5-17 and 19-48 are cancelled. This Office Action is made non-final after a RCE filed 10/03/2005.

#### ***Specification***

3. The disclosure is objected to because of the following informalities:

The applicant is advised to indicate all the cancelled claims 19-48 in the response.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (U.S. 6,859,872).

Re claim 1, Anderson et al. disclose in Figures 1 and 4 a reconfigurable chip (e.g. abstract) including: first and second multiplication units (e.g. 260 and 250); and a first multiplexer (e.g. 282) selectively connectable to supply first and second operands (e.g. result of 254 or 280 respectively), where in a first configuration the first operand is supplied through a second multiplexer (e.g. 310 with feedback through 80) to a first input of the first multiplication unit (e.g. 260) and the second operand is supplied through a third multiplexer (e.g. 300) to a first input of the second multiplication unit (e.g. 250).

Re claim 2, Anderson et al. further disclose in Figures 1 and 4 a fourth multiplexer (e.g. 286) selectively connectable to supply third and fourth operands (e.g. output from 264 and 284 respectively) where in the first configuration the third operand is supplied through a fifth multiplexer (e.g. 312) to a second input of the first multiplication unit and the fourth operand is supplied through a sixth multiplexer (e.g. 302) to a second input of the second multiplication unit.

Re claim 3, Anderson et al. further disclose in Figures 1 and 4 including an adder unit (e.g. 262 and 252) having first and second inputs respectively coupled to outputs of the first and second multiplication units (e.g. input into the ALUs 262 and 252).

Re claim 4, Anderson et al. further disclose in Figures 1 and 4 the first and second inputs of the adder unit (e.g. 262 and 252 respectively) are coupled through seventh and eighth multiplexers (e.g. horizontal lines) to the outputs of the first and second multiplication units (e.g. 262 and 250 respectively).

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6. Claim 18 is rejected under 35 U.S.C. 102(e) as being anticipated by Parvianinen (U.S. Patent Application Publication No. US 2002/0103841).

Re claim 18, Parvianinen discloses in Figures 6-7 a reconfigurable chip (e.g. Figure 6 and abstract) including: a multiplication block (e.g.. 14) including first and second multiplexers (e.g. multiplexers with label 14E), a multiplication unit (e.g. 14A) having first and second multipliers (e.g. at least more than 1 to generate partial sums), and an adder unit (e.g. ALUs), wherein a first configuration (e.g. [0049] and [0052]) instruction to the multiplication block configures the multiplication unit to receive operands from the first and second multiplexers and provide a summed product of the operands at an output, and a second configuration (e.g. [0050] and [0052]) instruction configures the adder units unit to receive the operands from the first and second multiplexers and provide a summed value of the operands (e.g. abstract).

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-4 and 18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (571) 272-3721. The examiner can normally be reached on M => F from 7:00 AM to 5:30 PM.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do  
Examiner  
Art Unit 2193

December 7, 2005

  
**KAKALI CHAKI**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER**